Record

DS 29/10/23

Scott. II-48—22,202—6-2-23.

# (192 ) Department.

SERIES.

G.O. No. 1063

DATED 6- 10- 23

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[Despatch Abstract.]

4. The D.G. of Police will be informed that he should not send an estimate to G.P.O. in the first instance unless the D.S.C. has certified that the scheme is complete in all details.

(In Commons - Vide previous page)

C.F. 21.

PUBLIC WORKS **DEPARTMENT.**

| | |
|---|---|
| In future letters, please quote No. 915/W2/21 dated 5-8-22 and short title | Rec'd ____ Enclosures ____<br>Reg'd ____ Spare copies ____ |

Telephone No.
Post Box No.
Telegraphic Address:

Coimbatore, **Dated** the July 192 2.

From (Name) P. Hawkins, Esq., M.Inst.C.E.,
(Designation) Superintending Engineer,
(Address) IV Circle, Coimbatore.

WORKS SECTION
-AUG 22
CURRENT NUMBER
1519

To The Chief Engineer, P.W.D.,
Madras.

Sir,

Constructing a Government Secondary and Training School for Mistresses at Mangalore.

With reference to G.O. Nos.627-W, dated 4th May 1921 and 1286-W, dated 8th September 1921, I have the honour to forward herewith an estimate amounting to Rs.1,58,850 for constructing a Government Secondary and Training School for Mistresses at Mangalore for favour of sanction.

Provision has not been made in the estimate for fittings and furniture.

Sd. P. Hawkins,
Supg. Engineer, IV Circle.
(By Order)

Manager, IV Circle Office.

Encls:- 1 Estimate with duplicate report data and abstract.
9 Plans S.E. IV Nos. ~~5~~, ~~5-A~~, ~~5-B~~, 3, 3-A 3-B ~~5-C~~, ~~5-D~~, ~~5-E~~, ~~5-F~~ and ~~5-G~~ of 1922 and W.C. No.110/19.

S.P./19-7-22.

The papers have not yet been received
This ~~will be disposed~~ may await
disposal till the receipt of the papers
from Fiona.

PO
W.E.M.

K 2

Encl

Q C.No. 1519 W&S B. from the S. E. IV ⊙ No. 9152 dt 5-8-22

Govt Secondary & Training Schs. for mistresses Mangalore.

Memo 1519 W&S/22-1 dt 4-9-22

The S. E is informed that the estimate is under Scrutiny and that orders there Thereon may be expected in two or three months: — Meanwhile, as Govt desire that the work ~~shall be~~ should be started this year, The S. E is requested to ~~commence~~ start collecting materials to the extent of the grant.

Sd/- xs Illegible
4.9.22 4.9.22

C.T.I
4/9

force

To

The S. E. IV circle

D 7/9/22

I.D

3 P.W.D

Govt. Secondary and Training school for Mistress, Mangalore

Memo 1519 WKS 1922-3 & 9.10.22

The staircase for the above building as designed by the S.E. is not very good, the rise being high for children.

As there is neither a water supply system nor any water carriage drainage at Mangalore, the water closets proposed on the plan are impossible. The undersigned considers that two latrines should be arranged in the compound as on Sanitary type designs No. 16 & 18 of 1915 — one of three seats for Mistresses and the other of twelve seats for the pupils

The small projections of roof shown on the section on S.E.-IV No. 3 are not very suitable to the West Coast; a plain roof is the most satisfactory.

A revised design carrying out the above alterations has been prepared with Pl. C.A. No. 191/1922 as amended by Pl. C.A. No. 204/1922, and two copies thereof are herewith forwarded to the S.E. IV Circle for information

To the S.E. IV circle with two copies of the design referred to

No Cal.

DRAFT FOR APPROVAL. 4 C.F. 20—4-2-14.

Office.

**Enclosures.**

Despatch No.

When given to fair-copying

Fair-copied by

Fair copy compared by

When despatched

Register No. , dated

From

*Subject.*

To

THE Memorandum

No 1549/WS/22 3/1/23

---

The S.E.-IV circle is requested to compare the crushing strength test of

(1) Laterite in lime mortar

(2) — do — in cement mortar

(3) Stock brick in lime mortar

(4) Country brick in lime mortar

(5) Country brick in cement mortar

& to report the result at an early date.

The reference should be treated as very

C.E. 1/25/12

for C.E. (B&R)

SE/22 12/12

To the S.E. Fourth Circle.

DEPARTMENT 4 JAN 1923

Received after a month

DC 3

C 4/1

T

to file

Subject:- Construction of a Government Secondary and Training School for Mistresses at Mangalore.

*****

M E M O R A N D U M.

No. 15.19.W.&.22-4. dated. 17th January 1923.

*****

The plans and estimates, amounting to Rs. 1,58,850, for the construction of a Government Secondary and Training School, for Mistresses, at Mangalore, are returned for revision, with reference to the following remarks, and resubmission at a very early date.

1. Main building--S.T.IV No. 3, 3A, 3B and 3C of 1922.

1. As the arrangement of the staircase, and of roof lantern over stair case hall, and of the bath rooms in the school block, shown in the plans submitted by the S.T. are considered unsuitable, fresh plans Spl.C.A.No. 191 and 199 of 1922 carrying out the above alterations are recommended for adoption. The estimate should be revised omitting the brick-nogged walls and cross walls etc., provided in the W.C. rooms as they are now unnecessary and also such other affected portions of the estimate, due to the adoption of the amended plans Spl. C.A.Nos. 191 and 199 of 1922.

2. It is seen, that all the class rooms are provided with 4 doors without any windows, According to the Educational

Act, no class room should have more than 2 doors, and the doors should be at the teacher's end of the room. The combined door window area should not be less than 1/5 of the floor area.

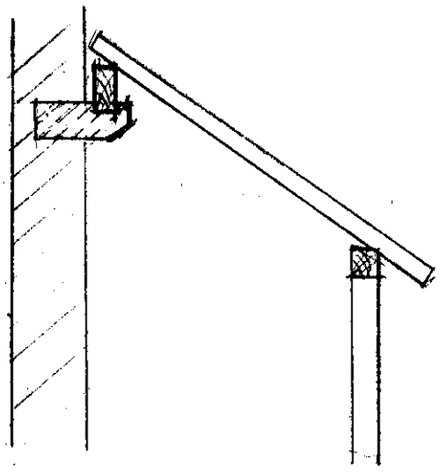
3. With reference to the new Circular on Madras Timbers (copies of which will be sent to the S.E. as soon as they are received from the press) the sections of timber scantlings need revision. Teak wood is proposed for the main building and store rooms, and 'Irul' for the rest of the buildings. The S.E. might proceed to use 'Mesua ferrea' (known as Vaināvu or Nānga in Malayalam), which is cheaper and stronger than teak, for all the buildings. Messrs. K.G. Industrial Co., Cannanore may be able to supply this timber.

This wood 'Mesua Ferrea' is classified under 1st class wood, according to the new Circular, and the following formulae should be used in calculating the size of roof timbers.

| | | Ends supported. | Ends partly fixed. |
|---|---|---|---|
| For strength | W = | $\frac{250\ b\ d^2}{L}$ | $312.5\ \frac{b\ d^2}{L}$ |
| For stiffness | W = | $170\ \frac{b\ d^3}{L^2}$ | $425\ \frac{b\ d^3}{L^2}$ |

Since the safe load in the stiffness formula for fixed ends is 5 five times more than that for supported ends, the ends of the scantlings may be well fixed, although for the purpose of calculations it is desirable, to treat them as partly fixed. The following points should be attended to in the fixing of the roof timbers.

(a) ~~joists should be fixed in walls~~ ~~about 12" spaces could be arranged~~. The ~~ordinary~~ joists should be built into the wall without air spaces. The joists and purlins over girders or truss joint should be fish plated of the same material, to make them partly fixed. The joists spacing ~~may vary from~~ will be between 15" & 20".



(b) The ordinary verandah rafter, as shown in the marginal sketch, should be calculated as supported. If the top end is built into the wall it is partly fixed.

(c) The economical spacing of rafter for the kind of timber now recommended for adoption will be 3' to 3'-6"

Wind pressure need not be calculated for a normal load of more than 10 lbs. per sq.ft. on our usual roofs. In open verandahs wind pressure may be neglected. Wind pressure allowance includes casual loads.

The following cases have been worked out in this office and the required sections are shown below:--

| | Section required (Melsua ferrea) | Estimated Secti (Teak) |
|---|---|---|
| 1. Joists in drill hall, coat, and ~~[illegible]~~ ... W.C. Rooms | 2½" x 7" | 2½" x 8" |
| 2. -do- students and class rooms | 2½" x 8" | 3" x 9" |
| 3. -do- in verandah | 2" x 6" | 2" x 7" |
| 4 Common rafters in class rooms (partly fixed) | 2" x 4" (at 3'-6" centres) | 2" x 4½" (at 21" centres) |
| 5 -do- in verandah roof which is continuous with the main roof (partly fixed) | 2" x 5" (at 3'-6" centres) | 2" x 6" (at 1'-9" centres) |
| 6. -do- in superintendent's room | 2" x 6" (at 3'-6" centres) | 2" x 4½" (at 1'-9" centres) |
| 7. Purlin in class room (partly fixed) | 4" x 6" | 5" x 8" |
| 8. Verandah bressummer ... | 4" x 5" | 4" x 6" |
| 9. Truss for a span of 22'-0" | | |
| Tie beam ... ... | 4" x 5" | 4" x 7" |
| Principal rafter ... | 4" x 5" | 4" x 7" |
| Strut ... ... | 4" x 4" | 4" x 4" |

(4) The sections of rolled steel joists should be altered as shown below:--

| | Proposed Section. | Estimated section. |
|---|---|---|
| Class rooms, Corridor & Store rooms ... | 18" x 6" x 55 lbs. | 16" x 6" x 62 lbs. |
| Porch ... ... | 12" x 5" x 30 lbs. | 12" x 5" x 32 lbs. |
| Superintendent's room 1st floor ... | 10" x 4½" x 25 lbs. | 10" x 5" x 30 lbs. |

(5) The intensity of pressure on the piers 'A', 'B', 'C', and 'D' marked red in plan S.E. IV No. 3/1922 works out to 2.75, 2.46, 2.5 and 2.5 tons per square foot respectively. The Superintending Engineer should satisfy himself whether the laterite masonry could safely bear this load. In this connection the Superintending Engineer's attention is drawn to C.E's Memo. No. 1519-Works/B/22-A2 dated 3rd January 1923 regarding the crushing strength and cost of laterite and brick masonry and he is requested to adopt that kind of masonry which is most economical, consistent with stability.

(6) The two feet rectangular openings in the veranda ground floor marked 'X' in plan should have a masonry parapet 3'-0" high.

(7) As the brick nogged partition walls in the Superintendent and Science rooms in the first floor have no supports underneath, they must be trussed so as to throw off their weight on to the walls instead of on to the terrace.

(8)(a) In the present financial stringency, it would be sufficient to pave the ground floor with Mission tiles 9" square, instead of with Cuddapah slabs, as the former is much cheaper than the latter.

(b) In the main building and other subsidiary buildings, the doors and windows may be of 'Oorroopoo' wood (known also as Irimpakam --'Hopea parviflora') and if 'Oorroopoo' planks are not suitable for door and

B

B

and window panels 'jack' wood may be used. For reepers also Coroopoo wood may be used instead of teak.

II. Quarters for the Superintendent Plan S.P.IV No. 3D/1922.

(1) The design S.P.IV No. 3D/1922 is considered unsuitable, in places such as Mangalore, as the roof is a complicated one, involving many valleys, which should be avoided, as far as possible, in those localities, where rain is abnormal. Design W.No. 1/1923, prepared in this office is recommended for adoption.

(2) As floors smoothed with 20 lbs of cement, do not wear long, where the occupants use boots and shoes, the flooring may consist of 3" concrete, plastered over with ½" cement mortar.

The type of flooring 'D' mentioned in Circular Memo. No. 34-C of 3rd January 1922 (viz) country brick on edge 4½" deep on 1½" of well rammed sand may be substituted for 'flooring with 4" concrete and rubbed smooth with 20 lbs. of cement' for the floors of out-houses (kitchen and godown)

(3) The walls of out-houses may be built of laterite in mud, except the 1' at top of walls and round doors, windows etc.

(4) The Superintending Engineer should include, provision for a stable, for the Superintendent, if the Director of Public Instruction, considers, that provision for the same is necessary.

III. Store rooms. S.T.IV No. 3F of 1922.

(1) According to the new Circular on 'Madras Timbers the following alterations are necessary in the sections of roof timbers.

| | Proposed section. (Messua ferrea) | Estimated Section. (Teak) |
|---|---|---|
| (a) Common rafters in rooms (partly fixed) | 2" x 3" (at 3'-6" centres) | 2" x 3" (at 2' centres) |
| (b) -do- in verandah-continuous with the main roof (partly fixed) | 2" x 4" (at 3'-6" centres) | 2" x 4½" (at 2' centres) |
| (c) Purlins (partly fixed) | 3" x 5" | 4" x 7" |
| (d) Hip rafter ( ~~90~~) | 4" x 7" | 5" x8" |
| (e) Truss 20'-0" span. | | |
| Tie beam | 4" x 5" | 4" x 7" |
| Principal rafter | 4" x 5" | 4" x 7" |

(2) The width of the store room verandah may be reduced from 8'-0" to 6'-0" as the latter width is considered sufficient. The verandah rafters may then be of sections 2" x 3"(at 3'-6" intervals).

IV. Tiffin shed. S.T. IV No. 3~~F~~ of 1922.

(1) This design is also considered unsuitable for the locality and design W. No. 7/1922 is recommended for adoption.

(2) The roofing for the tiffin shed may be of plain Mangalore tiles instead of 'Mangalore tiles embedded in lime mortar over ceiling tiles'.

(3) The thickness of levelling course of concrete may be reduced from 4" to 3".

V. Latrines S. T. IV. No. 3G of 1922.

Instead of this design, a latrine of 24 seats for the girls based on San. ~~Mm~~ Type Design No. 18 of 1915 and one of 3 seats based on San. Type Design

No. 16 of 1915 for the staff may be adopted, in lieu of design S.P.IV.No. 3G of 1922

VI. Walls of 1'-1½" thick and foundations of 1'-10½", 2'-7½", 3'-4½" etc. have been provided in the estimate. If such thickness could be built with laterite masonry the 1'-6" wall shown in the design W.No. 7 of 1922 may be reduced to 1'-1½"; walls of 2'-3" and 1'-3" proposed for the cross walls of rooms in the main building, may be reduced to 1'-6" and 1'-1½" respectively, if the loads on them are within the permissible limits. The thickness of verandah walls of the ground floor in the main building may also be suitably reduced

VII. 1. The Lump Sum provision of Rs.1428 allowed in the estimate, for clearing and levelling sites, forming roads, drains, etc., is considered insufficient, as the level of the site is very uneven, and as a new road may have to be laid connecting the Belmotta Road and Mr.Winter Botham's Bungalow, since the existing private road falls within the site of the proposed buildings.

2. Provisions have not been made in the estimate for water supply, gas and water connections for the laboratory, the furniture etc. required for the school. The S.P. is requested to provide for these in consultation with the D.P.I. and the Superintendent of the School.

3. The site plan does not seem to

have been prepared with care. The position of the Superintendent's quarters has not been shown. The positions of other buildings are shown in pencil with various crossings.

The orientation of the several buildings also appears defective. The main building should face North and South, so that the porch may face the Belmetta road. The rest of the buildings should be built in rear of the main building allowing sufficient space for recreation. The Superintending Engineer should arrange to have the site plan redrawn neatly showing the position of all the buildings. The Director of Public Instruction and the School Superintendent may be consulted if necessary.

4. A uniform depth of 5'-0" foundation has been proposed for the main building; but trial pits show that hard Laterite is met with at 44.38 at trial pit No.6, 42.81 at No.5, 42.23 at No.4, 44.20 at No.3 and 45.27 at trial pit No.1. It therefore seems unnecessary to provide an uniform depth of 5 ft. The foundations may be built in steps with reference to the level at which hard laterite is met with, at each place. It is sufficient to take the foundations 6" into the hard strata. The site on which the latrine and outhouses for the Superintendent are to be built may be of made up earth it seems unnecessary to provide foundations of 5½' and 6' deep for these minor buildings. The Superin-

13 12 9

tending Engineer ~~may~~ should decide on the foundations required before the work is put in hand.

VIII. Rates.

1. For terrace roofing and flooring, a rate of Rs.4-6-0 per 1000 terrace bricks and tiles has been allowed towards ~~cartage~~ 3 miles cartage of these materials ~~bricks~~; but it is seen from the Schedule of rates that the rate should be only 0-14-0 (vide col. 6 of the table for cartage of materials in the schedule). The discrepancy should be rectified.

2. A rate of Rs. ~~400~~ 300 per ton ~~of~~ for Rolled Steel Joists is considered sufficient, as against Rs.400 provided in the estimate as the prices of imported articles are going down.

IX. The Superintending Engineer is requested to revise the plans and estimates with reference to the foregoing remarks and submit them duly revised, as early as possible, through the Director of Public Instruction.

1st reminder sent 7/6/23

I.B. Remind after 2 months.

C.E. 17/1

~~D.P.I.~~ for C.E. P.W.D. (Buildings & Roads Branch) 16/1/23

To the S.E. IV circle in duplicate with plans W.1/23 and W.T. of 22, and SPLC A Nos 191 and 799 of 1922 SE IV Nos 3 and 3A to 4/1922 and site plan W.C. No 116 of 1918 and estimates

DESPATCHED 20 JAN 1923

No. 269/W
P71B

Office of the Superintending Engineer,
Fourth Circle, Coimbatore,
Dated 19th February 1923.
7-3-23

From

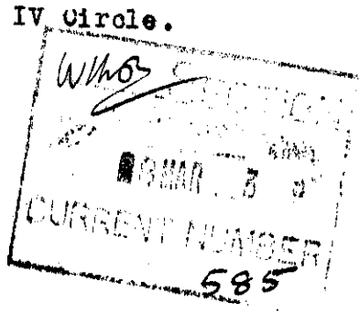
P. Hawkins, Esq., M.Inst.C.E.,

Superintending Engineer, IV Circle.

To

The Chief Engineer, P.W.D.,

Chepauk, Madras.




Sir,

Subject:- Strength and cost of Masonry.

With reference to your No. 1519-Wks-B-22-1 dated 3-1-1923, I have the honour to submit copy of statement of tests of laterite from Malabar quarries which I had made, soon after I took over this Circle in 1921, at the Engineering College.

2. As regards bricks there is a considerable variation in quality and strength in this Circle, the worst bricks being those on the market in Coimbatore and Ootacamund and the best those in Vellore.

As regards strength of built masonry I am inclined to think that the result of tests made in the several Divisions might show considerable variation for the same class of bricks, owing to the varying conditions and the fact that arrangements for putting on ~~all~~ an ultimate load might vary, and in any case are not easy. I would suggest for your consideration whether it would not be more satisfactory if we send to Madras carefully identified samples of different classes of bricks and laterite and had the masonry blocks built up and tested in Madras, -- where the tests, made under uniform conditions, would be more likely, I think, to give reliable results. We could, if -- desired, send samples of local limes at the same time.

3. As regards the use of cement mortar in place of lime I am inclined to think as the result of examination of examples of

failure that the advantage of this is in some cases over-rated and that in the case of brickwork it is of importance only when the bricks are of bad shape. If the bricks are well shaped so that they have a uniform bearing throughout with thin mortar joints the ultimate crusing strength of the masonry under a vertical load is that of the bricks and the use of cement will not materially increase it. If the bricks are badly shaped -- failure seems to be usually due to fracture of the brick left with part of its length unsupported owing to shrinkage of mortar in the thick mortar joint which results from badly shaped bricks. In such a case the use of cement mortar is effective, but it is usually cheaper to make well shaped bricks than to use cement mortar.

In any case, if the crushing strength of the brick in use is less than that of the lime mortar, application of the results of comparative tests of masonry with selected and stronger bricks would be misleading. I am referring of course to the class of brick with which we frequently have to work.

In the case of laterite, as the blocks can be dressed to a very uniform bed I doubt if the use of cement mortar makes any material difference under direct load.

4. Should you still consider it better to have tests made locally I will carry on and report results as soon as possible.

Enclosure--

1 copy of statement of tests of laterite.

Superintending Engineer,
Fourth Circle.
21-2-23

E.A.K./21-2-23.

Engineering Laboratory.

College of Engineering, Guindy — 1921.

Report on compression tests for Executive Engineer, P. W. D. West Coast Division, Calicut — for construction of a Hospital at Mangalore.

General Description of specimens:— Laterite cubes from quarries near Mangalore — one sample of each kind was received.

| College Number. | Mark or number & owner. | Original dimensions & cross section inches. | Length inches. | Area of cross section square inches. | Density in lbs per cubic foot. | Load at first crack: Total tons | Load at first crack: Stress tons per square foot | Maximum load: Total tons | Maximum load: Stress tons per square foot | Safe load allowing a factor of safety of: 4 | 6 | 8 | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Sample 1 from Padwa quarry | 9"×9" | 9 | 81 | 128 | 16.65 | 29.6 | 19.35 | 34.4 | 7.4 | 4.9 | 3.7 | |
| 2 | Sample 2 from Nantoor quarry | 9"×8" | 9 | 72 | 120 | 8.4 | 16.8 | 12.28 | 24.56 | . | . | - | |
| 3 | Sample 3 from Eyadi East quarry | 9"×8.9" | 9 | 80.1 | 117 | 7.8 | 14.02 | 8.35 | 15.01 | . | - | . | |
| 4. | Sample 4 from Eyadi west quarry | 9"×9" | 9.2. | 81 | 131 | 17.46 | 31.04 | 19.61 | 34.88 | . | . | . | |

Sd. —

2-12-21

Professor of Engineering.

11

PUBLIC WORKS DEPARTMENT.

Current No. 585-Works/B dated 8-3-23 from the Superintending Engineer, IV Circle, No. 269-W/P-71-B dated 7th March 1923.

***

Subject:-- STRENGTH AND COST OF DIFFERENT KINDS OF MASONRY.

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M E M O R A N D U M.

No 1519-Works/B/22-6 dated 9th April 1923.

*****

Reference.-S.E.IV No.269W/P-71-B dated 7th March 1923..

The Superintending Engineer, Coimbatore Circle, is informed that the report on the comparative strength and cost of different kinds of masonry called for in C.E's Memo. No. 1519-Works/B/22-2 dated 3-1-23 is required ~~urgently~~ in connection with the construction of the Government Secondary and Training School for Mistresses at Mangalore, in order to decide on the most economical material to use in its construction. It is probably too late now, because of the coming xxx recess, to have tests conducted at the Engineering College. The tests may therefore be conducted locally i.e., in Mangalore,

The matter is very urgent as there is a grant of Rs.21, 500 for the work during the current year. If brickwork is twice as strong as laterite and twice as expensive it will be economical to use bricks because (i) the width of foundations can be reduced as the brick building will be lighter and (ii) the smaller quantity of brickwork will make

make construction quicker. The Superintending Engineer has to choose the cheapest form of construction and he must settle this point. The Superintending Engineer's attention is, in this connection, invited to paragraph I(5) of C.E's Memo. No. 1519-Works/B /22-4 dated 17th January 1923 in which the plans and estimates for the Mangalore Training School were returned to him for revision.

For C.E.(B&R.)

To

The Superintending Engineer
Coimbatore Circle.

DESPATCHED
10APR1923

C.R.S./7-4-23.

C.F. 21.

19

Public Works DEPARTMENT

In future letters, please quote No. ~~139~~ 468 dated and short title * P71B2

Rec'd ..... Enclosures .....

Rec'd ..... Spare copies .....

Telephone No.
Post Box No.
Telegraphic Address

Coimbatore, Dated 20th April 1923.

From (Name) C. B. Connell, Esq., A.M.I.C.E.,
(Designation) Officer in charge,
(Address) Coimbatore Circle.

RECEIVED
21 APR 23
REGISTRY NUMBER
991

To The Chief Engineer, P.W.D.,
Madras.

Sir,

Government Training school for Mistresses at Mangalor

Ref:- Your No. 1519-Wks-B-22-6, dated 9-4-23.

---

I have the honour to state that laterite in West Coast already has been/tested and it is found that the laterite in Padua quarry (now selected for the work) bears a safe pressure of 3.7 tons per sq.ft. with a factor of safety 8. The laterite masonry works out cheaper at Mangalore. It has been settled to use laterite for the work.

The estimate under revision will be submitted by the end of 1st week of May 1923.

S. Venkataramana Aiyar
for Officer in charge,
Coimbatore Circle. 19-4-23.

19.4.23

E.A.K./19-4-23.

40

PUBLIC WORKS DEPARTMENT.

C.No 991 WKS-B dated 21.4.23

Subject:— Govt Training School for Mistresses at Mangalore.

Memorandum

No 1519 WKS B / 22-7 Dated 27th April 1923

Reference.— S.E.'s No 468 W / P-71-B2 dated 20.4.23

The test on Padua laterite conducted in 1921 in connection with the New Combined Hospital at Mangalore, to which the S.E. apparently now refers, was that made on a single laterite cube (9"x9"x9"), and not on a column of built laterite for which alone the factor of safety of 8 is applicable. For the same reason Circ. memo No 3063 C dated 24.4.23 is now under issue, cancelling Circ. memo No 2106 C dated 18.3.20 and reducing the safe limit of 3 tons prescribed therein to 2 tons as in the previous Circ memo No 4031 C dated 11.5.14. The Chief Engineer considers that the 2-ton limit for West Coast laterite masonry should not be exceeded in this case unless the S.E proves by comparative tests on columns of built laterite (Padua) that it can stand a higher pressure ~~on thereon but not so.~~

DESPATCHED
27 APR 1923

To
The S.E. Coimbatore Circle

for C.E.
(B4 R)

26.4.23

IR/133 29/V

11 JUN 1923

Public Works Department.

Buildings & Roads Branch.

601/11

2)

Wing Section

27 JUN 1923

CURRENT NUMBER

**REMINDER.** **REPLY.**

No 5334 dt 6.6.23

601/11

To The Superintending Engr Coimbatore

To The Chief Engineer. P.W.D. Madras.

The undersigned ~~has the honour to invite~~ is directed to invite ~~invites~~ attention to the communication noted in the margin and to request that this reminder may be returned at once with information as to—

Memo No. 15196/A/23, dated 17.6.23 (pbs-13 cards) 22-4.

(1) the stage at which the matter now is,

(2) the date by which a reply may be expected, ~~and~~

(3) ~~the circumstances which have caused the delay.~~

2. It is requested that the reply to this reminder may be sent not later than 7 days after the date of its receipt.

(By order)

The plans and estimate will be submitted in a week.

(Sd). W. S. McGeorth. 23.6.23.

Superintending Engineer

Coimbatore Circle.

S. Venkataramaiya

JUN 25 1923

for Superintending Engineer

Coimbatore Circle.

Enc 5/11

G 23.6.23.

JUN 12 1923

Office PWD Secretariat

Station Chepauk

Dated 8th June '23

Signature. 8/6

Designation. Superintendent

PC 3

P.W.D

L.O. to 11 Co. 7.23

TGD 29.6.23

Rem 7/6/23

**SUBJECT.**

Govt Secondary Training School for Mistresses Remarks returning the estimate for revision & resubmission

TGD

ars

A. / B. / N.P. } (a)

DEPARTMENT.

ORDINARY ~~ROUTINE~~ SERIES.

† G.O. No. dated

Scott. II—47—697 Bks.—24-1-18 (6).

CIRCULATED. / NOT CIRCULATED. / NOT SEEN BY C.S.

191 .

| | |
|---|---|
| Receipt numbers . | 2657/B/14 |
| Number and date of previous proceedings. | |

**Tabling Abstract.**

Buildings - Skanara
Dpts & Sub-Depts &
Mangalore Kundapur & Sulia
Estate Rs 2487
Obtained

(b) **Index Headings.**

MAIN HEADING Buildings

CROSS REFERENCES.

SPECIAL INDEX.

DO NOT SPECIAL INDEX.

(a) and (b) not to be filled in for 'Routine' Series.

G.F. 51

23

Public Works DEPARTMENT

In future letters, please quote No. 1 dated 6012/11 and state "File"

Rec'd ..... Enclosures .....

Reg'd ..... Spare copies .....

DIRECTOR OF PUBLIC INSTRUCTION MADRAS

Telephone No. M 1594 5/23
Post Box No.
29 JUN 1923
Telegraphic Address

Dated 18th June 1923. 192

From (Name) W. G. Molesworth, Esquire,
(Designation) Superintending Engineer,
(Address) Coimbatore Circle.

To The Chief Engineer, P.W.D., Madras.

Through the Director of Public Instruction, Madras.

Government Training school for Mistresses at Mangalore.

Ref:- Your Memo. No. 1519-Wks-B-23-4 dated 17th January 1923. & 1579 Wks B-22-8 dt 14-5-23.

---

I forward herewith plans and estimates for the above work duly revised subject to the following remarks:--

I (7). Wooden partitions are substituted for brick nogged partitions.

8(6). Erool wood with teak shutters for doors and windows and erool wood for scantlings and reepers has been provided in the estimate as the Executive Engineer reports that Ooroopoo and Mesua ferea wood of good quality are not available in the locality.--Vide A & B

II (2). As country bricks are not made in the neighbourhood the flooring of the kitchen and godown of Superintendent's quarters will be made of 3" concrete plastered over with cement.

II 4. The Superintendent of the school has been consulted and he states that a stable is not required. In consequence no provision is made for stabling in the estimate.

VI. The laterite available in the locality is 18" x 9" x 6" and 15" x 10" x 6" in size. So the thickness of the walls in foundation basement and superstructure have been altered accordingly.

VII 4. The foundations have been provided after actual inspection by Mr. Hawkins and will be modified if necessary during execution.

Abutments for archways at end verandahs being insufficient the archways at these places have been reduced from 9' to 6'.

Though Madras Terracing is provided for the 1st floor, it is brought to notice that Terrace bricks of good quality are not available in the locality. So ~~Howdis~~ Hourdis flooring with 1'-3" centres may have to be substituted. So an estimate for this alternate specification is attached. The estimate will exceed by Rs.1900 if that specification has to be adopted.

The Superintendent does not require any furniture except some fittings for which a lump sum of Rs.1500 is added.

No gas fittings and lavatories are required.

As regards water supply a lump sum of Rs.3000 is provided for pumps, cisterns and pipe fittings. An estimate for Rs. 1700 for improvements to the existing well is also incorporated in the main estimate.

In your Memo. No. 1519-Wks-B-22-7, it is laid down that 2 tons per Sq.ft. should be taken as the permissible maximum limit of pressure on West Coast laterite from Padua quarry laterite at Mangalore unless it can be shown by actual tests on a block of built laterite that it can bear more with a factor of safety of 8.

Pending the tests by the Principal, College of Engineering to whom the materials are being arranged to be sent, the estimate is now submitted for sanction as the grant of Rs. 21500/- has been allotted.

I propose to commence the construction of the outhouses, the Superintendent's quarters &c. and collecting materials such as girders and wood work ; and the main building may be built up to the level of the basement. The cost of these preliminaries may be met from the existing grant. It is

only the material for the superstructure walls of the ground floor that will have to be decided if it is to be of late ite or brick in mortar as the pressure on the base joint exceeds 2 tons per sq.ft. This can be decided after the results of tests are known.

The site now acquired seems to be insufficient and the Executive Engineer has in consultation with the Superintendent of the School submitted proposals to acquire 0.41 acres of more land as shown in the site plan at a cost of Rs.3000/-. The ~~configuration - the~~ proposed positions of the various buildings are now shown correctly in the plan of the site already acquired in black pencil. The Executive Engineer proposes that the building may be placed as shown in red, that is if the proposal to acquire additional land for the site is approved of.

Subject to your approval a sum of Rs.3000 is added to the estimate for this purpose.

Sd. W.G.Molesworth, 18-6-23,
Suptg. Engineer, Coimbatore Circle.

S. Venkatarama Aiyr.
JUN 26 1923
For Superintending Engineer,
Coimbatore Circle.

Enclosures-- 20.

1 file of estimate with Data, abstract &c.

16 prints in duplicate S.E.C.Nos. 7,7-A,7-B, 8,9,10,15 & 16 of 1923 ~~and S.E.IV No.3-D/1922.~~

2 Tracings W.C.Nos.61 & 62 of 1923.

1 Plan W.C.No.63/1923.

15 & 16 in duplicate will follow.

E.A.K./20-6-23.

1623-25 CPW 26

P.W.

C.No. 1587 W&B/B From the S.E. Combatore Circle No. 8450/6012/11 dt 18/27-6-

Endt. herein by the D.P.I., N.R.C No. 1570 2/25 dt 5-7-

Govt. Training school for Mistresses at Mangalore

Urgent

1587 W&B-18 18-7-23.

Two pencil drawings prepared in this office, one shewing the layout of the above buildings as proposed by S.E. after the additional land is acquired and the other shewing the layout of the buildings, in the land already acquired are herewith forwarded to the S.E. Combatore Circle and he is requested to report at an early date in consultation with the Educational authorities whether there is any objection to adopting the layout suggested in the latter plan. It seems that it is not absolutely essential to acquire more land at a cost of Rs 3,000/- in these days of retrenchment.

(1) drawn
21 T
18/7

18/7

To
The S.E. Combatore Circle
with two pencil plans.

18/7

D.O
Remind after a month

18/7/23
for CE
BAK

(C.E's table detailed in Section

C.F. 32 (a)—213,128—3-10-22.

In reply, please quote number, date and short title.

Public Works DEPARTMENT.

*Received* ..... *Registered* .....

From (Name) W. G. Molesworth, Esquire,

(Designation) Superintending Engineer,

Post Box ....., (STATION) Coimbatore Circle.

*Telegraphic Address* .....

To The Chief Engineer, P.W.D.,

M a d r a s.

*No.* 1004 *dated* 27th July 192 3.

Sir, 601-Z.11

Govt. Training School for Mistresses, Mangalore.

---

I request your early orders to start the above work as requested in this office No.931-W, dated 14-7-23.

Sd. W.G.Molesworth, 27-7-23,
Suptg.Engineer, Coimbatore Circle.

For Superintending Engineer,
Coimbatore Circle.

30.7.23

30 JUL 1923

ENCLOSURES .....

.....

.....

SPARE COPIES .....

E.A. 30-7-23

28

P.W.D.

Cor: 1806 WKoB From the S.E Coimbatore Circle. C.1004/W/60/1.2.11 dt 27/31.7.11

Memo 1650 Wks/B-1/28-8-23

Govt. Training School for Mistresses. Mangalore

The S.E is requested to expedite this reply to memo. No. 1587 WKoB/-1/31c

Do

To
The S.E Coimbatore
Circle

for S.E
(B&C)

G.O.(1.

Public Works DEPARTMENT.

In future letters, please quote No. 931 dated 1923 and short title.

Rec'd ____ Enclosures ____

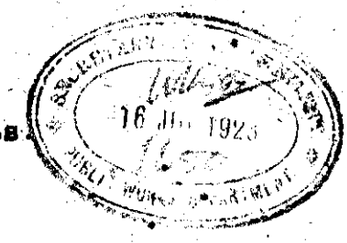
Reg'd ____ Spare copies ____

Telephone No.
Post Box No.
Telegraphic Address:

Dated 6th July 1923.

From (Name) W.G.Molesworth Esquire,
(Designation) Superintending Engineer,
(Address) Coimbatore Circle, Coimbatore.

To The Chief Engineer, P.W.D.,
Madras.



Sir,

Reference:—Mangalore Training School.

Copy of letter No.791 S.E., dated 2-7-1923, from W.J.Davis Esq., Executive Engineer, West Coast Division, to the Superintending Engineer, IV Circle, Coimbatore:—

I have the honor to forward herewith petition from Mr.A.P.Chirukandan the contractor on the above work for compensation for loss sustained by him through it becoming necessary to stop further work owing to the uncertainity of the design.

The contractor claims Rs.1,047.

The Sub Divisional Officer, Mr.Tombat recommends Rs.846, for the reasons recommended in his No.1089 S dated 18-6-1923.

I recommend very strongly that the recommendation of the Sub Divisional Officer be approved as the contractor tendered for the whole work and not merely for the supply of materials and the stoppage of work was necessitated through the unforeseen altering of the designs by the Chief Engineer. Early approval to the above is requested so that tenders may be called for for carrying out the instructions in your No.465 W.E dated 27-6-1923.

Copy with enclosures forwarded to the Chief Engineer, P.W.D., for favour of early orders on this office No.845-W, dated 27-6-23. Under the circumstances reported by the Executive Engineer, the construction of outhouses may be ordered to be started

Enclosures.

To be kindly returned
( 1 Agreement (Unapproved)
( 1 S.D.O's.No.165 M 30-5-23.
( 2 Letters of contractor
( 1 S.D.O's No.1089 E dated 18-6-23.

1 Copy of S.E's No. 463 W.C. dated 27-6-23.

(Sd.) W.G.Molesworth, 6-7-23,

Suptg. Engineer, Coimbatore Circle.

By Order.

S. Venkataramana Aiyar

For Superintending Engineers, Coimbatore Circle.

10.7.23.

11 JUL 1923

V.S.10.7.

Enclosure.

Copy of Memorandum No.463 W.C./601-2-11, dated 27-6-23, by the Superintending Engineer, Coimbatore Circle:--

The agreement and comparative statement are herewith returned for revision in continuation of this office No.845 W dated 27-6-23.

As for the collection of materials etc, he may do so after perusal of this office No.845 W, dated 27-6-23, and the estimate.

4

6/1-7 CE

44

Paid

Cov. 1650 WKOB From the S.E Coimbatore Circle No. 931 W/601-2.11 dt 6/14.7.23

~~Remarks~~

folio 7 section

~~L. 1650 WKOB dt~~

---

Memo 1587 WKOB/23-24 B dt 25

for Mistresses

Training School/Mangalore

The S.E is informed that ~~that~~ orders to start work on the Construction of out houses to the above buildings. Cannot be issued until the orientation of the several buildings proposed is finally settled. His Reply to memo of 1587 WKOB 23-24 dt 18.7.23 regd: the addl lands required for the school should therefore ~~be acquired from the S.E~~ be expedited

To

The S.E Coimbatore Circle

Thro' Collrs

Rcd 10/8

for CE

(Bldgs)

O.F.61. Public Works DEPARTMENT.

In future letters, please quote No. 1172 dated 6 Ol-Z-11. and short title *

W Rec'd ____ Enclosures ____

Reg'd ____ Spare copies ____

Telephone No.
Post Box No.
Telegraphic Address:

Original

Dated 23rd August 1923.

From (Name) W.G. Molesworth Esquire,
(Designation) Superintending Engineer,
(Address) Coimbatore Circle.

WKS SECTION
29 AUG 1923
CURRENT NUMBER
2007

To The Chief Engineer,
P.W.D., Madras.

Sir,

Reference:—Your Memo No.1587 Wks.B/1, dated 18-7-23 and 1650 Wks.B-1, dated 2-8-23 etc. Government Training School for Mistresses at Mangalore.

I forward herewith the letter of Sub Division Officer and the correspondence connected with it for favour of perusal and orders to start work, as there is a grant of Rs.21,500, for the work during the current year.

Enclosures.
1 Correspondence in 2 sheets.
(to be kindly returned). &
2 Paper plans.

(Sd.) W.G. Molesworth, 23-8-23,
Supdg. Engineer, Coimbatore Circle

By Order.

Manager,

Coimbatore Circle Office

V.S.27.8.

46 Pathp 20-8-23

Copy of letter No.1388 E dated 4-8-23 from M.R.Ry. K.R. Tombat, Avl., Assistant Engineer, Northern Sub Division, to the Executive Engineer, West Coast Division.

---

1081 Govt. Girls' school and Training school for Mistresses Mangalore- Land- additional acquisition of-

Reference- Dvl. No.1109 S.K dated 30-7-23.

---

I interviewed yesterday the Superintendent of the above school. She still holds the same opinion as expressed in her letter R.C.No.83/23 dated 11-4-23, and is emphatic on the point of the additional acquisition.

2. The opinion she had formed after joint inspection of the site and consideration of the alternative layout as shown in the plan W.C.No.62/1923, which practically agree with those shown on the paper tracings, was stated in para 7 of my letter 109 M. dated 11-4-23, enclosure to para 2 and 3 of my No.699 E dated 12-4-23. The Superintendent's reply in confirmation in R.C. No.83/23 dated 11-4-23 was submitted with 718 E dated 14-4-23.

3. Further you have also inspected the site and verified the proposals as in W.C.No. 62/1923 and decided on the additional acquisition.

4. In the lay out proposed by the Chief Engineer the north west corner of the kitchen block is shown to be resting on the boundary line but on inspection it will be seen that the road is in a cutting and so as to avoid the slopes of the cutting which extends into our compound the north-west corner of the kitchen block should be shifted 6' or 7' inside by doing which the Superintendent's quarters will be brought still closer to the main building i.e. by about 10'. The distance between the two will be 65'-0". With the previous alternative proposal shown in plan W.C.No.62/23 wherein I had shown the Superintendent's quarters at a distance of 82'-6" behind the main building of the school she had serious objection to the proximity of the quarters to the school, which permitted her no privacy whatever. This point is now made worse with the present lay out. The Superintendent in her letter tells me that

she cannot occupy the quarters if this lay out should be adhered to. On one side she will be too close to the road and on the other to the school building. She cited the parallel instance of Superintendent's quarters attached to Govt. Girls' school Cannanore which having been constructed in a like manner have been vacant owing to the unsuitability due to the want of privacy.

5. The present strength of the school is between 400 to 500. Within the next 2 years she expects the numbers to increase to 600. The school is popular and its growing strength portends future extension of school buildings and provision for hostel. Having regard to this she wishes the lay out to be far more flexible not to cause any permanent disability in the matter of extension. Further extension will be only on the eastern side and if a building for hostel is required the Superintendent opines that Mr. Saldhana's bungalow would have to be acquired. As a matter of necessity she would have then to be as close as possible to the hostel. With the lay out proposed by Chief Engineer she would be farther away from the hostel than with the lay out recommended by Superintending Engineer.

6. She is further of opinion that if retrenchment is needed she would rather not have the Superintendent's quarters constructed immediately since she could live outside and the quarters are not at present a matter of urgent necessity.

7. Even without the Superintendent's quarters she thinks the present site is too small for garden as well as play ground. She particularly stresses the need of an ample and unrestricted extent of play ground which she thinks is not less necessary than a good building.

8. She is therefore definitely of opinion as follows

1. The additional acquisition should be proceeded with as proposed since it is essential.
2. The Superintendent's quarters be dropped for the present.
3. The lay out of other buildings as recommended by Supg. Engineer to be adhered to.

9. An inspection of the site will be quite convincing on these points.

10. I am requesting the Superintendent to confirm her opinion

as stated herein and her reply will be submitted on receipt.

---

No 1039 S.E
18-8-23.

Copy to the Superintending Engineer, Coimbatore Circle, with copy of letter No.R.C.83/23 dated 6-8-23 from the Superintendent, Govt. Secondary and Training school for Mistresses, Mangalore for information.

The lay out ~~has~~ suggested by the Chief Engineer is not suitable. Recommended that suggested by Supg. Engineer in No.845 W dated 27-6-23 should be adhered to.

.osure.
2. Tracings.

Sd. W.J.Davis 14-8-23
Executive Engineer,
West Coast Division

M.K.N.16-8.

V Venkatasubba
Manager and Accountant Mahs.

Enclosure.

Letter from the Superintendent, Govt. Secondary & Training school for mistresses, Mangalore to the Asst. Engineer, Northern Sub Division, No. R.C. No. 83/23 of 6-8-23.

---

With reference to your letter No.1388 dated 4-8-23, I have the honour to state that I confirm my opinion on all the points referred to therein as was discussed between us during your interview with me.

---

49

PUBLIC WORKS DEPARTMENT.

NOTE BY THE CHIEF ENGINEER, P. W. D.

No. 1579/W&B/22-9 dated... 16. September 1923.

*****

In G.O.No.627-W dated 4th May 1921 the proposal to construct at an approximat cost of Rs. 1,38,010 a new building with outhouses for the Government Secondary and Training School for Mistresses at Mangalore, South Kanara District was approved and the Superintending Engineer Coimbatore Circle was asked to prepare detailed plans and estimate for the scheme.

Subsequently in G.O.No.1286-W dated 8th September 1921 sanction was accorded for constructing a residence for the Head Mistress or Superintendent at a cost of Rs. 5,810 and the Superintending Engineer was asked to include this item also in the detailed estimate referred to above.

II. Accordingly the Superintending Engineer submits plans and estimates aggregating Rs. 1,47,400 for the scheme, the particulars of which are as detailed below:--

Site plan W.C.No. 62/1923 (Lay-out) ✓

| | | | |
|---|---|---|---|
| 1. | Main block-Training School S.E.C.No. 7, 7A, 7B of 1923 and S.C.A.No. 199/1922. ... ... | Rs. | 1,05,000 }<br>1,900 } |
| 2. | Quarters for the Superintendent with out-houses S.E.C.No.10 of 1923. | " | 7,320 |
| 3. | Tiffin shed S.E.C.No. 9 of 1923. ... | " | 6,400 |
| 4. | Store shed S.E.C.No. 8 of 1923. ... | " | 4,210 |
| 5. | Latrine of 24 seats for pupils S.E.C.No.15 of 1923 ... | " | 2,630 |

| | | | |
|---|---|---|---|
| 6. | Latrine of 3 seats for mistresses S.E.C.No. 16 of 1923. ... | Rs. | 700 |
| 7. | Improvements to existing well | " | 1,700 |
| 8. | Roads, levelling and clearing site. ... ... | " | 4,800 |
| 9. | Pumps and pipe fittings etc. | " | 5,000 |
| 10. | Cost of additional land proposed to be acquired. ... | " | 5,000 |
| 11. | Possible rise in prices before work is completed. ... | " | 6,710 |
| | Total. | Rs. | 1,47,400 |

III. The drawings and the estimate have been scrutinised in the Chief Engineer's Office and the following remarks are made:--

(1) The dormer roof in the 1st floor of main buildings is unsuited to the West Coast with its abnormal rain fall; a plain roof should be adopted throughout, if necessary glazed Mangalore tiles in roof may be provided ~~for purposes of~~ light with suitable swing -- shutters hinged to underside of rafters for regulating light ~~at will.~~

(2) The Superintending Engineer's estimate ~~did~~ does not include provision for valley sheets under the 4 principal valleys over the staircase.
/The omission has now been supplied

(3) The permissible maximum limit of 2 tons per sq.ft. on the West Coast laterite has been exceeded in several ~~positions of the wells~~ places marked on the plan S.E.C.No. 7 of 1923.

A -- 2.75 tons per sq.ft.

B -- 2.46 -do- -do-

C -- 3.12 -do- -do-

D -- 3.38 -do- -do-

Unless it could be shown from the results of tests by the Principal College of Engineering to whom samples have been sent that the laterite from Padva quarry in Mangalore, will bear the loads detailed above, the Superintending Engineer, -- Coimbatore Circle will adopt the following proposals:--

(a)TheGirders should be placed longitudinally to relieve a portion of the load on the main wall.

(b) The thickness of cross walls ground floor bearing the girders should be increased from 1'-6" to 2'-3".

(c) To distribute the terrace load on the cross walls transmitted by 2 contiguous girders, a reinforced concrete slab 5'-0" long and 6" thick should be placed immediately below the girders , if cut stones of long lengths with required thickness are not available.

(d) Verandah pier B. The arch in the verandah pier works out to ~~xxxx

(5) The roof timbers etc., should be painted with 2 coats of suitable paint including priming coat instead of one coat as proposed.

(6) The Superintending Engineer will satisfy himself that the sections of the foundations proposed for the several buildings are suitable. He will also arrange for suitably fixing the roof timbers as their sections have been arrived at treating them as partly fixed. The size of reepers should be determined with reference to the spacing between rafters.

(7) It is observed that a sum of Rs 3000 has been provided in the estimate in consultation with the Superintending Engineer for acquiring an additional extent of 0.40 acre, the site already acquired being found insufficient. This provision has been accepted as the C.E considers that the additional land is necessary for the proper lay-out of the buildings

IV. With the foregoing remarks the estimate aggregating Rs. 1,47,400/- is recommended for sanction.

10/9/23

(Sd) M. R. K.
C. E.(B. & R.)

D.

10/9/23

JRS./10-9-23.

P.W.D V. 57—6,426—11-1,
E. No. 12

# Coimbatore CIRCLE.

## West Coast DIVISION.

[Here describe the purpose for hich the building is required.]

*Name of work.*—Constructing a Government Secondary and Training School with subsidiary buildings for — Mistresses at Mangalore.

The plans and estimate have been prepared in accordance with the ~~requisition of~~ Chief Engineer's memo No. 1519-Wks-B-22-4, dated 17th January 1923,

and are signed by the Superintending Engineer, Coimbatore Circle.

[In the case of the building being according to a type design the G.O

*Particulars of Estimate.*

| | | |
|---|---|---|
| (1) | Main building | Rs. 97637 |
| | *Subsidiary Buildings.*— | |
| (2) | Superintendent's quarters with outhouses. | 6813. |
| (3) | Pillia shed. | 5959 |
| (4) | Store shed. | 3920 |
| (5) | Latrines. { FOR 24 SEATS | 2443 |
| | " 3 " " | 655. |
| | MISCELLANEOUS ITEMS. | 7600 |
| | | 125027 |

| | | |
|---|---|---|
| Lightning conductor ... ... ... | Rs. | — |
| Land compensation already acquired vide G.O.No.22-W, dated 7-1-19. | " | |
| Compound wall ... ... ... ... | " | |
| Well ... ... ... ... ... | " | 1700 |
| Contingencies at 5 per cent. ... ... | " | 6033 |
| Petty supervision at " ... ... | " | 3030 |
| EXTRA TO MEET POSSIBLE RISE IN RATES AT 5% | " | 6710 |

DETAILS OF CONSTRUCTION.

*Nature of surface soil.*— Red earth mixed with gravel.

*Nature of sub-soil.*— Hard laterite below 2½' to 5' from ground level.

The particulars of soil and sub-soil were certified by M.R.Ry. S.Adaikalaswami Pillai, Sub Dvl. Officer, on -- 9-7-1918.

*Maximum pressure on soil (vide calculations, page ).*—

lculations showing the maxi-
pressure at the point where
ure appears to be greatest
d be given separately. The
nt at which pressures are calcu-
ated to be clearly marked on the
ground plan.]

*Description of foundation proposed.*

Main building. Superintendent's quarters. Tiffin shed & store shed.

Plastering with lime morter 2 coats interior and exterior. Cement plastering ½" thick for basement.

Outhouses for Superintendent's quarters. Plastering with lime morter 1 coat and whitewashing 2 coats.

*Pointing.—*

*Painting.—*

Main building. Tiffin shed & store shed. Painting 2 coats with chocolate paint ~~over a primary coat~~ for main build, and painting 1 coat ~~over a primary coat~~.

*Wood-oiling.—*

Superintendent's quarters & outhouses. Wood oiling 2 coats.

Doors and windows of store shed. Wood oiling 2 coats.

Calculation showing the maximum pressure on soil on the wall between the class rooms and the verandah.

| | | |
|---|---|---|
| Weight of roof in first floor. 1 x 11½ x 20¼ x 35 lbs. | | 8151 lbs. |
| Weight of truss say. | | 200 lbs. |
| Walls of superstructure 1 x 11½ x 1½ x 15 x 130 | 28031 | |
| Deduct for (1) 2¼ x 10 x 1¼ x 130 ) (2) 2' x 7 x 1½ x 130 ) | 5931 | 22100 |
| Terrace flooring over ground floor 1 x 11½ x 14⅜ x 173. | | 28599 |
| Weight of girder, say. | | 700 |
| Weight of wall up to sill level of window. 1 x 11½ x 2½ x 11 x 130 | 37001 | |
| Deduct for (1) 2¼ x 2¼ x 7 x 130 ) (2) 8 x 2¼ x 7 x 130 ) | 8702 | |
| | 28299 | 28299 |
| Total on (7¼ x 2¼) sq.ft. | | 88049 lbs. |

Therefore for 1 sft-- $\frac{88049}{(7\frac{1}{4} \times 2\frac{1}{4})}$ 5398 lbs. or 2.41 tons.

The pressure on the piers at sill level of weir alone between door and window in ground floor class rooms works out to and it is within permissible limit of 3 tons per sft.

Pressure as above. 89049 lbs

Masonry in superstructure below sill level of window $9\frac{1}{4} \times 2\frac{1}{4} \times 3 \times 130$ 8117 lbs

-do- in basement. $11\frac{1}{2} \times 2\ 5/8 \times 2 \times 130$ lbs. 7849 lbs.

-do- in foundations. $11\frac{1}{2} \times 3\frac{7}{8} \times 3 \times 130$ lbs. 15137 lbs.

-do- concrete. $11\frac{1}{2} \times 5\frac{1}{4} \times 2 \times 120$. 14490 lbs.

Total on $(11\frac{1}{2} \times 5\frac{1}{4})$ or 483/8 sft 133642 lbs.

Therefore pressure on 1 sft. 2214 lbs. or 0.99 or 1 ton.

(SD) W.G. MOLESWORTH
18-6-23
SUPG ENGINEER
COIMBATORE CIRCLE

(TRUE COPY)

S. [illegible]
FOR SUPG ENGINEER
COIMBATORE CIRCLE.

JUN 26 1923

# ESTIMATE FORM—Abstract.

| Quantity. | Description of work. | Rate. | Per | Amount | Total. |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| | | Rs. | | Rs. | Rs. |
| | **GENERAL ABSTRACT.** | | | | |
| | **Main Building.** | | | | |
| 1. | Constructing a Secondary and Training School Vide separate estimate. | | | | 105000 |
| | **Sub-Buildings.** | | | | |
| 2. | Constructing Superintendent's quarters with out houses | | | | 7320 |
| 3. | Tiffin shed | | | | 6400 |
| 4. | Store shed | | | | 4210 |
| 5. | Latrine of 24 seats | | | | 2630 |
| 5(a) | do of 3 seats | | | | 700 |
| 6. | Improvements to the existing well | | | | 1700 |
| | Pumps and pipe fittings etc. | | | | 3000 |
| 7. | Clearing and levelling site, forming roads etc. | | | | 3330 |
| 8. | Minor fittings | | | | 1500 |
| 9. | Add 5% extra to meet cost of possible rise in rates which may occur before the work is completed | | | | 6710 |
| | | | | 142500 | 142500 |
| | N.B:- If Hourdis slab terracing is preferred the estimate amount will be | | | | 144200 |
| | If new site is also proposed to be acquired the amount will come to | | | | 147900 |

Sd. W. G. Molesworth, 18-6-23,
Supg. Engineer, Coimbatore Circle.

(True Copy)

S. Venkataramana Ayya

FOR SUPG ENGINEER
COIMBATORE CIRCLE.

JUN 26 1923

Grand total of estimate ...

STATION_____

Date_____192

Executive Engineer.

P.W.D

p1 CF Cr. No. 1519 W.Ks B From the S.E Coimbatore Circle No. 915W/601-22 dt 5.8.

p2 CF Memo to .. .. .. 1519 W.Ks B/22-1 dt 4.9.22

p1, 5.13 CF Memo .. .. .. 1579 W.Ks B/22-4 dt 17.1.23

p2-3 CF Cr. No. 1587 W.Ks B From the D.P.I. Madras R.Rc No. 1594 D/23 dt 5.7.23

p2 6 CF Memo to the S.E Coimbatore Circle No. 1587 W.Ks B dt 18.8.23

Memo .. .. .. No. 1587 W.Ks B/23-2 dt 13.8.23

p4-9-5.7 CF Note by the Ch. Engr P.W.D No. 1519 W.Ks B/22-9 dt 11.9.23

Govt. Training School for Mistresses Mangalore

Ws

With refce to the orders in G.O.s No. 627 W dt 4.5.22 + 1286 W dt 8.9.22, the S.E Coimbatore Circle submitted in August 1922, plans & estimates amounting to Rs 1,58,850/- for the construction of a Govt. Secondary Training School for Mistresses at Mangalore with quarters for the Staff. The plans & estimates were scrutinised by the Ch. Engr & were returned to the S.E for revision with refce to the remarks in memo No. 1579 W.Ks B/22-4 dt 17.1.23 These have now been revised & submitted through the D.P.I. The present estimate amounts to Rs 1,47,400/- & is Rs 3580 or 2.5% in excess of the amount administratively approved for the work. Of this excess, a sum of Rs 3000/- represents the

V W

p1 CF

p5.13 CF

p2 CF

X the amount of the revised estimate is Rs 147400 and not as shown in the Govt. memo dt 8.9.22 Rs 143820 Rs 3580

Govt 11 on p2 CF

the value of the acquisition of 0.41 acres of land said to be required for the location of the buildings as the site already acquired is reported to be insufficient. As a site measuring 2 acres. & 83 cents was originally selected for the school after much Consideration ~~was~~ it was thought that the buildings could be located in this ~~already existing~~ site without further acquisition, and a fresh layout plan was prepared in the Ch. Engrs office. This was forwarded to the S.E Coimbatore Circle in Memo No. 1587 WKS B7-C 9/8.7.25 and he was asked to report in Consultation with the Coll authorities whether, with a view to economy, there was any objection to adopting the layout suggested in the Ch. Engrs office. The views of the officers Concerned with the founds on pp 46-48 CF. It will be seen therefrom They are strongly in favour of the acqn. and the Ch. Engr also agrees with this view in the circumstances explained.

The plans & estimates have been in other respects also scrutinised by the

p 25 cf

vide A on p 17/c and 22 c of 7.1.19 Flag

vide plan at Flag 'R'

p 9 & CF

Flag 'R'

Ch. Engr and his remarks are contained in his note on top 49-52 C.F. He recommends the proposals for Sanction and this may be accepted.

A draft order on the Case is submitted and it may be sent to the Law (Edn) & Finance Depts for acceptance prior to circulation to M3 & C1. The Law (Edn) Deptt will doubtless consider the necessity for the Construction of Sepoli quarters first at present, with refce to the portion marked Q on page 47 C.F.

In his letter No. 1492W dt 24.8.23. the S.E asked for orders to start work as there was a large grant for the work in the current year. As the present cost of the proposals exceeds the amounts for which approval has been given, orders to start work can be issued only after the proposals are accepted by Govt. The Law (Edn) & Finance Depts may therefore be requested to treat the Case urgent

115 C.F

P.W.C. No 1492

Rs. 143000

L. Sec 3492B 19/9/23.

19 SEP 1923.

P.W. No. 519 W/B/22-10 18-9-23.

17/9/23

Law (Edn)
Finance.

15/9/23

Thd 13.9.23

Hon'ble Law Minister

Draft

15.9.23

H

C. 3492B

Law (Sec.)

In view of the opinion of the Supdt. of the Mangalore training school contained in paras 6–8 of letter on p. 47 ante, it is submitted that the construction of quarters for the Supdt. may be dropped for the present. This will reduce the cost of the whole scheme to Rs. 1, 40, 080, ~~Appendix~~ I may be consulted no. on this point and he may be requested to treat the case as urgent.

1, 47, 400
7, 320
1, 40, 080

(H)

CVV
19.9.23

CR
20/9/23

ASSISTANT SECRETARY
21 SEP 1923
FINANCE DEPARTMENT

SD
19.9.23.

As a matter of urgency, the Supdt's quarters may be dropped for the present. The draft is Memorise accepted

JMM
21/9/23

Secretary

Law Secretariat. 3492 B
dt: 19.9.23.

Finance Dept

Submitted that this dept may agree with Law dept's note above.

FC 1213 BII
WMS
22.9.23

SECTION
CURRENT NUMBER
2397

P. W. D.
29.9.23

FC Finance 1213 BII-1
28.9.23

GHS
26.9.23

CR
22/9/23

PWD
28/IX.

5

PWD

No

A revised draft order is submitted with reference to the Comm (Edn) + Finance Dept note on para 4 ante. It may be circulated to Mr. I Cl for approval

Grant in budget of Rs 21500.

Rec 3/10 — 3/10/23 — 2/10/23

Under Secy 3/10/23

P.W.D. Box no. 39

3-10-23

Recd on 5-10-23

M3

C1

If the acquisition of the site is taken up the trees over the Sanctioned estimate will be Rs 3000 It is now proposed to drop the Contents of Quantities in Sanctioned — when the work is again taken up, the estimate may be with higher — But as the work is urgent, I do not object to the drop

Secy Edn 4.10.23

US 5

Rec 5/10

The draft order may now be issued

Issued 5/10/23

5/10/23

Secrt. II-10 (s)—48,962—2-2-22. (6)

P. W. DEPARTMENT.

| | Date. | Initials. |
|---|---|---|
| When received for Fair-copying. | | |
| When copied .. | | |
| When examined .. | | |
| When signed .. | | |
| When despatched .. | | |

READ AGAIN G.O. No. 627 W, dated 4-5- 1921.
1286 W " 8-9. 1921.

READ ALSO:—

C. No. 1579 W/21 from the S.E. Coimbatore Circle No. 915 W/601-21, dated 5-8- 1922.

" " 1567 " " " E-P.D. read with 1594 D/20 " 5-7- 1920.

" " " " Order by the Ch. Engr. P.W.D. No. 1579 W/21-9, dated 11-9-20

ORDER.

No. 1003 W dated 6-10- 1923.

In this note read above the Ch. Engr recommends for sanction detailed estimates amounting to Rs 1,47,400/- for the construction of a building with out houses for the Govt Secondary Training School for Mistresses at Mangalore. The estimates contains a provision of Rs 7,320/- for the quarters of the Superintendent. As the Govt. do not consider that the construction of the quarters to be urgent

passed

item of

work work, for the balance of the
[illegible] and [illegible] aggre-
gating Rs 140,080 - for the
balance of the works will be called
for [illegible] to
[illegible] of the Engineer

this note read

above.

2 This Department has been
allotted on Budget a sum
of 1923-24 & classified as
Civil Buildings for original
works.

3 The S.E Andaman is
is requested to get the Norms
& estimates sanctioned by the
Govt before [illegible] the work
on Rs

4 The S.E [illegible] may erect
to [illegible] of
a draft notification for the
acquisition of land required in
case the land cannot be secured
by private negotiation

T&D
2.10.23 Yes

J/10/23

2/10/23
for S

147400
1,40,000

b/p [illegible]

B to note call in proof 4

DECIPHERED
8 OCT 1923

Do

The S.E [illegible] the Circle
[illegible] Engineers
[illegible] on
[illegible] Engineer Department

Further enclosure from Judicial dy number
dated 10-10-23

Scott. II-47—697 Bks.—24-1-18 (5).

DW

A. / B. / N.P. } (a)

DEPARTMENT.

ORDINARY / ROUTINE SERIES.

† G.O. No. dated 191

CIRCULATED.
~~NOT CIRCULATED.~~
~~NOT SEEN BY C.S.~~

| | |
|---|---|
| Receipt numbers .. | 1519 WKSB/W, 1587 WKSB/25 |
| Number and date of previous proceedings. | |

**Tabling Abstract**

Bundh - South Kanara - Mangalore
Grant sanctioning Training
School for Mistresses - Estimate
Rs 14,050 - Sanctioned

(b) **Index Headings.**

MAIN HEADING Bundh

CROSS REFERENCES.

SPECIAL INDEX.

DO NOT SPECIAL INDEX.

(a) and (b) not to be filled in for 'Routine.' Series.